

## CARDIAC FUNCTION AND HEART FAILURE

### EFFECT OF NESIRITIDE ON RENAL FUNCTION IN PATIENTS WITH DECOMPENSATED DIASTOLIC HEART FAILURE: COMPARISON OF PATIENTS WITH ISOLATED RIGHT VENTRICULAR FAILURE WITH PATIENTS WITH NORMAL RIGHT VENTRICULAR FUNCTION

ACC Poster Contributions

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**Background:** Nesiritide improves symptoms and hemodynamics in patients with left ventricular (LV) failure (LVF). We evaluated for the first time nesiritide's effect on renal function in patients with acute decompensated heart failure (ADHF) and normal LV function and we compared this effect in patients with right ventricular (RV) failure versus patients with no RV failure.

**Methods:** We reviewed data of 657 patients admitted to AECOM with ADHF and normal LV systolic function. 140 patients had isolated RV failure secondary to pulmonary hypertension and 517 patients had normal right ventricular function. In the RVF group, 70 were treated with IV nesiritide while the remaining 70 patients received only IV furosemide and served as controls. In the non RVF group, 258 received nesiritide and 259 served as controls. Serum creatinine and GFR levels at baseline, 3 days, time of discharge and one month post-treatment were assessed.

**Results:** The results for RVF and non RVF groups (nesiritide and controls) are shown in fig1. There was a significant difference between RVF and non RVF nesiritide group in the mean change of GFR at 1 month ( $-8.22 \pm 8.98$  vs.  $3.55 \pm 19.88$ ,  $p < 0.001$ ). Similar results were noted for all groups when we used creatinine data.

**Conclusions:** Caution should be exercised when using nesiritide in patients with RV failure and renal failure. Interestingly, patients with normal RV function seem to recover their renal function at 1 month after nesiritide infusion despite an initial significant deterioration.

